



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/912,225	07/23/2001	Christof Koch	06618/790001/CIT 3411	4325
20985	7590	03/09/2005	EXAMINER	
FISH & RICHARDSON, PC 12390 EL CAMINO REAL SAN DIEGO, CA 92130-2081			DANG, DUY M	
			ART UNIT	PAPER NUMBER
			2621	

DATE MAILED: 03/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/912,225

Applicant(s)

KOCH ET AL.

Examiner

Duy M Dang

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) 8-41, 48-53 and 55-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 42-47 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/20/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Group I invention (Claims 1-7, 42-47, and 54) in the reply filed on 10/7/04 is acknowledged.

2. Claims 8-41, 48-53, and 55-59 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Invention Group II-V, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 10/7/04.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the term "its" recited in line 6 is unclear to what applicant refers to.

Dependent claims 2-7 are also rejected for the same reasons as above.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 42-47 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Rao [US Patent No. 5,566,246. Art of record, IDS filed 8/20/01].

Regarding claim 1, Rao teaches: analyzing an image to determine salient parts of an image representation without analyzing the actual content of the image [see saliency measure estimators shown in figure 1 and the saliency measures comprising long, smooth, contrasts refers

Art Unit: 2621

to claimed salient parts according to col. 3 lines 14-20], and using said salient parts to determine an effectiveness of said image in displaying its content [see figure 1: note that the ranking of saliency in unit 60 is used in vision application 65 matching (col.5 lines 1-3)].

Regarding claim 2, Rao further teaches wherein said analyzing comprises analyzing pixels of said image using mean pixel values [see average change of curvature mentioned in col. 4 line 8. Note that average change of curvature refers to average length of contour which is formed by edge pixels or edgels (col. 3 lines 50-51). Thus, the average pixel values or mean pixel values are inherently included in the average curvature].

Regarding claim 3, Rao further teaches wherein said analyzing comprises analyzing pixels on said image using higher order statistical variations [see weight omega mentioned in col. 4 lines 48-65].

Regarding claim 4, Rao further teaches said image representation includes a single image at a single time [see image frames $F_1 \dots F_n$ mentioned in col. 6 line 15. Note that each image frame F represents a single image at a single time].

Regarding claim 5, Rao further teaches said image representation includes a sequence of images over time [see sequence image frames $F_1 \dots F_n$ mentioned in col. 6 line 15].

Regarding claim 42, Rao teaches:

analyzing an image to determine salient parts of the image representation by obtaining information about the image in at least two different spectral ranges [see saliency measure estimators shown in figure 1 and the saliency measures comprising long, smooth, contrasts refers to claimed salient parts according to col. 3 lines 14-20. The image obtained by using infra-red sensor shown in figure 2 and image obtained by using TV sensor shown in figure 3 have two

Art Unit: 2621

different spectral ranges according to col. 5 lines 5-10]; and correlating said information about the image to determine salient portions of the image with out looking for specific content of the image [see saliency measure estimators shown in figure 1].

Regarding claim 43, Rao further teaches using said salient portions to determine an effectiveness of said image in displaying its content [see figure 1: note that the ranking of saliency in unit 60 is used in vision application 65 matching (col.5 lines 1-3)].

Regarding claim 2, Rao further teaches wherein said analyzing comprises analyzing pixels of said image using mean pixel values [see average change of curvature mentioned in col. 4 line 8. Note that average change of curvature refers to average length of contour which is formed by edge pixels or edgels (col. 3 lines 50-51). Thus, the average pixel values or mean pixel values are inherently included in the average curvature].

Regarding claim 44, Rao further teaches wherein said analyzing comprises analyzing pixels of said image using mean pixel values [see average change of curvature mentioned in col. 4 line 8. Note that average change of curvature refers to average length of contour which is formed by edge pixels or edgels (col. 3 lines 50-51). Thus, the average pixel values or mean pixel values are inherently included in the average curvature].

Regarding claim 45, Rao further teaches wherein said analyzing comprises analyzing pixels on said image using higher order statistical variations [see weight omega mentioned in col. 4 lines 48-65].

Regarding claim 46, Rao further teaches said image representation includes a single image at a single time [see image frames $F_1 \dots F_n$ mentioned in col. 6 line 15. Note that each image frame F represents a single image at a single time].

Art Unit: 2621

Regarding claim 47, Rao further teaches said image representation includes a sequence of images over time [see sequence image frames $F_1 \dots F_n$ mentioned in col. 6 line 15].

Regarding claim 54, Rao further teaches optimize a display of visual information [see visual application 65 of figure 1 for object matching determination].

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rao [US Patent No. 5,566,246. Art of record, IDS filed 8/20/01] in view of Kikinis [US Patent No. 5,929,849].

The advanced statements in paragraph 6 with regard to Rao as applied to claims 1-5 above are incorporated herein.

With regard to claim 6, Rao fails to explicitly teach using evaluating an effectiveness of said image in an advertising context.

Kikinis teaches using salient features in advertising in order to attract purchaser as mentioned in column 2 lines 32-36.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of salient effectiveness of an image in advertising as taught by Kikinis in combination with Rao for that reasons.

Art Unit: 2621

Regarding claim 7, Kikinis further teaches said using comprises evaluating a display showing one ore more items for sale [see col. 2 lines 25-36. Note the use of salient features to an advertised item attract buyers].

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M Dang whose telephone number is 703-305-1464. The examiner can normally be reached on Monday to Friday from 5:30AM to 2:00PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 703-308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd
2/05



Duy M. Dang
Patent Examiner